

IN THE CLAIMS:

The present listing of the claims replaces all previous versions and listings.

1-3. (Canceled)

4. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 3~~, further comprising which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask;

an expansion step of expanding the foreign matter area of the binarized image by a determined quantity;

a normalization step of normalizing the measured intensity of the minute point by using a reference area of the minute point; and

a reliability judgment step of obtaining an area of each minute point after the foreign matter elimination step and judging the reliability of the measurement value by using a ratio of the obtained area and the reference area of the minute point.

5. (Original) A fluorescent intensity measuring method according to claim 4, further comprising a correction step of correcting the second image by using a reference image.

6. (Original) A fluorescent intensity measuring method according to claim 4, wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

7. (Original) A fluorescent intensity measuring method according to claim 6, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

8. (Original) A fluorescent intensity measuring method according to claim 7, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

9. (Original) A fluorescent intensity measuring method according to claim 6, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

10. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 3, further comprising~~ which measures the intensity of minute points which are

arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask;

an expansion step of expanding the foreign matter area of the binarized image by a determined quantity;

a normalization step of normalizing the measured intensity of the minute point by using a reference area of the minute point; and

a correction step of correcting the second image by using a reference image.

11. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 3,~~ which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask;

an expansion step of expanding the foreign matter area of the binarized image by a determined quantity; and

a normalization step of normalizing the measured intensity of the minute point by using a reference area of the minute point;

wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

12. (Original) A fluorescent intensity measuring method according to claim 11, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

13. (Original) A fluorescent intensity measuring method according to claim 12, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

14. (Original) A fluorescent intensity measuring method according to claim 11, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

15. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 2, further comprising~~ which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask;

an expansion step of expanding the foreign matter area of the binarized image by a determined quantity; and

a reliability judgment step of obtaining an area of each minute point after the foreign matter elimination step and judging the reliability of the measurement value by using a ratio of the obtained area and the reference area of the minute point.

16. (Original) A fluorescent intensity measuring method according to claim 15, further comprising a correction step of correcting the second image by using a reference image.

17. (Original) A fluorescent intensity measuring method according to claim 15, wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

18. (Original) A fluorescent intensity measuring method according to claim 17, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

19. (Original) A fluorescent intensity measuring method according to claim 18, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

20. (Original) A fluorescent intensity measuring method according to claim 17, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

21. (Canceled)

22. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 2,~~ which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:
a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask; and

an expansion step of expanding the foreign matter area of the binarized image by a determined quantity;

wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

23. (Original) A fluorescent intensity measuring method according to claim 22, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

24. (Original) A fluorescent intensity measuring method according to claim 23, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

25. (Original) A fluorescent intensity measuring method according to claim 22, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

26. (Canceled)

27. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 26, further comprising~~ which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask;

a normalization step of normalizing the measured intensity of the minute point by using a reference area of the minute point; and

a reliability judgment step of obtaining an area of each minute point after the foreign matter elimination step and judging the reliability of the measurement value by using a ratio of the obtained area and the reference area of the minute point.

28. (Original) A fluorescent intensity measuring method according to claim 27, further comprising a correction step of correcting the second image by using a reference image.

29. (Original) A fluorescent intensity measuring method according to claim 27, wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

30. (Original) A fluorescent intensity measuring method according to claim 29, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

31. (Original) A fluorescent intensity measuring method according to claim 30, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

32. (Original) A fluorescent intensity measuring method according to claim 29, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

33. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 26, further comprising~~ which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask;

a normalization step of normalizing the measured intensity of the minute point by using a reference area of the minute point; and

a correction step of correcting the second image by using a reference image.

34. (Currently Amended) A fluorescent intensity measuring method according to claim 26, which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask; and

a normalization step of normalizing the measured intensity of the minute point by using a reference area of the minute point;

wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

35. (Original) A fluorescent intensity measuring method according to claim 34, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

36. (Original) A fluorescent intensity measuring method according to claim 35, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

37. (Original) A fluorescent intensity measuring method according to claim 34, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

38. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 1, further comprising which measures the intensity of minute points which are~~ arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image;

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask; and

a reliability judgment step of obtaining an area of each minute point after the foreign matter elimination step and judging the reliability of the measurement value by using a ratio of the obtained area and the reference area of the minute point.

39. (Original) A fluorescent intensity measuring method according to claim 38, further comprising a correction step of correcting the second image by using a reference image.

40. (Original) A fluorescent intensity measuring method according to claim 38, wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

41. (Original) A fluorescent intensity measuring method according to claim 40, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

42. (Original) A fluorescent intensity measuring method according to claim 41, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

43. (Original) A fluorescent intensity measuring method according to claim 40, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

44. (Canceled)

45. (Currently Amended) A fluorescent intensity measuring method ~~according to claim 1~~, which measures the intensity of minute points which are arranged on a substrate having a substantially flat surface and include a fluorescent substance, comprising:

a first imaging step of emitting light with a wavelength with which the fluorescent substance can be excited and obtaining an image of each minute point including the fluorescent substance as a first image;

a second imaging step of obtaining an image of foreign matter adhering on the substrate as a second image by light with a wavelength which does not excite the fluorescent substance;

an extraction step of obtaining a binarized image by extracting a foreign matter area from the second image; and

a foreign matter elimination step of disabling an image at a part overlapping the foreign matter area in the first image with the binarized image being used as a mask;

wherein the extraction step obtains the binarized image by using a differential image acquired from the second image.

46. (Original) A fluorescent intensity measuring method according to claim 45, wherein the extraction step determines a binarization level of the binarized image by using a frequency distribution of the differential signal corresponding to each pixel.

47. (Original) A fluorescent intensity measuring method according to claim 46, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

48. (Original) A fluorescent intensity measuring method according to claim 45, wherein the differential signal is standardized with an intensity in a minute area corresponding to the differential signal.

49. (Canceled)

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☒ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER:** _____

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.